

# Diagnostic decision tool for adults with a urinary catheter who have a suspected catheter associated UTI (CAUTI)

Excludes adults with recurrent UTI. When using this tool, refer to the [Background](#) and the corresponding web text for more information on clinical decision making and target groups.

Urinary symptoms/signs, abnormal temperature, non-specific signs of infection

↓ YES

**Do not perform urine dipsticks:** Most adults with urinary catheter in place for more than one month, will have bacteria present in the bladder/urine without infection. Asymptomatic bacteriuria is not harmful, and although it causes a positive urine dipstick, antibiotics are not beneficial and may cause harm

↓ ALL

Consider Genitourinary Syndrome of Menopause (vulvovaginal atrophy), urethritis (caused by irritation or inflammation), sexually transmitted infections, and prostatitis. Follow relevant management and safety-netting guidance



**1. THINK SEPSIS** - check for symptoms/signs using local or national tool such as [NICE](#), [RESTORE2](#) or [NEWS2](#)

**PYELONEPHRITIS** - check for any new symptoms/signs

- ☐ kidney pain/tenderness in back, under ribs
- ☐ flu-like illness<sup>†</sup>
- ☐ nausea/vomiting<sup>†</sup>
- ☐ shaking chills (rigors) OR temp over 37.9°C or 36°C or below<sup>†</sup>

<sup>†</sup>rule out other causes - see box 6 below

YES

**2. If suspected sepsis OR pyelonephritis**

- if urinary catheter for more than 7 days: consider changing (if possible remove) as soon as possible but do not delay antibiotics
- obtain urine specimen before antibiotics are taken and send for culture (from new catheter if changed), but do not delay treatment
- immediately start antibiotic/management for upper UTI/sepsis using local/national guidelines for sepsis or pyelonephritis in [CAUTI](#), considering resistance risk
- refer if symptoms/signs suggest further investigation or hospitalisation is required

↓ NO

**3. CHECK ALL FOR NEW symptoms/signs of CAUTI**

- ☐ fever, this could be a temperature 1.5°C above patient's normal twice in the last 12 hours
- ☐ new or worsening delirium/functional decline
- ☐ new suprapubic pain
- ☐ visible haematuria
- if fever and delirium/functional decline only: exclude other infections before treating solely for CAUTI (box 6)
- check for catheter blockage/outflow and consider catheter removal or replacement
- see age specific UTI diagnostic [decision tool](#) for additional symptoms to consider if catheter has been removed in previous 48 hours

YES

**4. CAUTI LIKELY:** share self-care and safety-netting advice using [TARGET UTI](#) leaflet

- if urinary catheter for over 7 days consider changing (if possible remove) as soon as possible, but do not delay antibiotics
- obtain urine specimen before antibiotics are taken and send for culture (from new catheter if changed)
- offer immediate antibiotics using local/[national prescribing guidelines](#)
- review antibiotic choice with culture result

↓ NO

**5. CHECK for other causes of delirium if relevant (PINCH ME)**

- |   |   |
|---|---|
| <input type="checkbox"/> <b>P:</b> Pain             | <input type="checkbox"/> <b>M:</b> other Medication   |
| <input type="checkbox"/> <b>I:</b> other Infection* | <input type="checkbox"/> <b>E:</b> Environment change |
| <input type="checkbox"/> <b>N:</b> poor Nutrition   |   |
| <input type="checkbox"/> <b>C:</b> Constipation     |   |
| <input type="checkbox"/> <b>H:</b> poor Hydration   |   |

YES

Consider other local/[national resources](#) for delirium management

**7. Give safety-netting advice about consulting if:**

- worsening symptoms
- no improvement 48 hrs after starting antibiotics
- signs of pyelonephritis
- any symptom/sign of sepsis

↓ NO

**6. CHECK ALL for other localised infection**

- \*Some other sites of common infection might include:
- ☐ respiratory tract infection
  - ☐ skin and soft tissue infection
  - ☐ gastrointestinal tract infection
- This list of causes is not exhaustive.*

YES

Follow local diagnostic and treatment guidance

↓ NO

Advise "watchful waiting/active monitoring" with further investigation for other causes

ALL

**8. If worsening symptoms/signs consider:** admission or start/change antibiotic

ALL

**KEY:**

<span style="background-color: #f8d7da; border: 1px solid #f5c6cb; padding: 2px;"> </span> Suspected sepsis alert	<span style="background-color: #d4edda; border: 1px solid #c3e6cb; padding: 2px;"> </span> Action advised
<span style="background-color: #fff3cd; border: 1px solid #ffeeba; padding: 2px;"> </span> UTI symptom	<span style="border: 1px solid #deeaf8; padding: 2px;"> </span> Other advice